
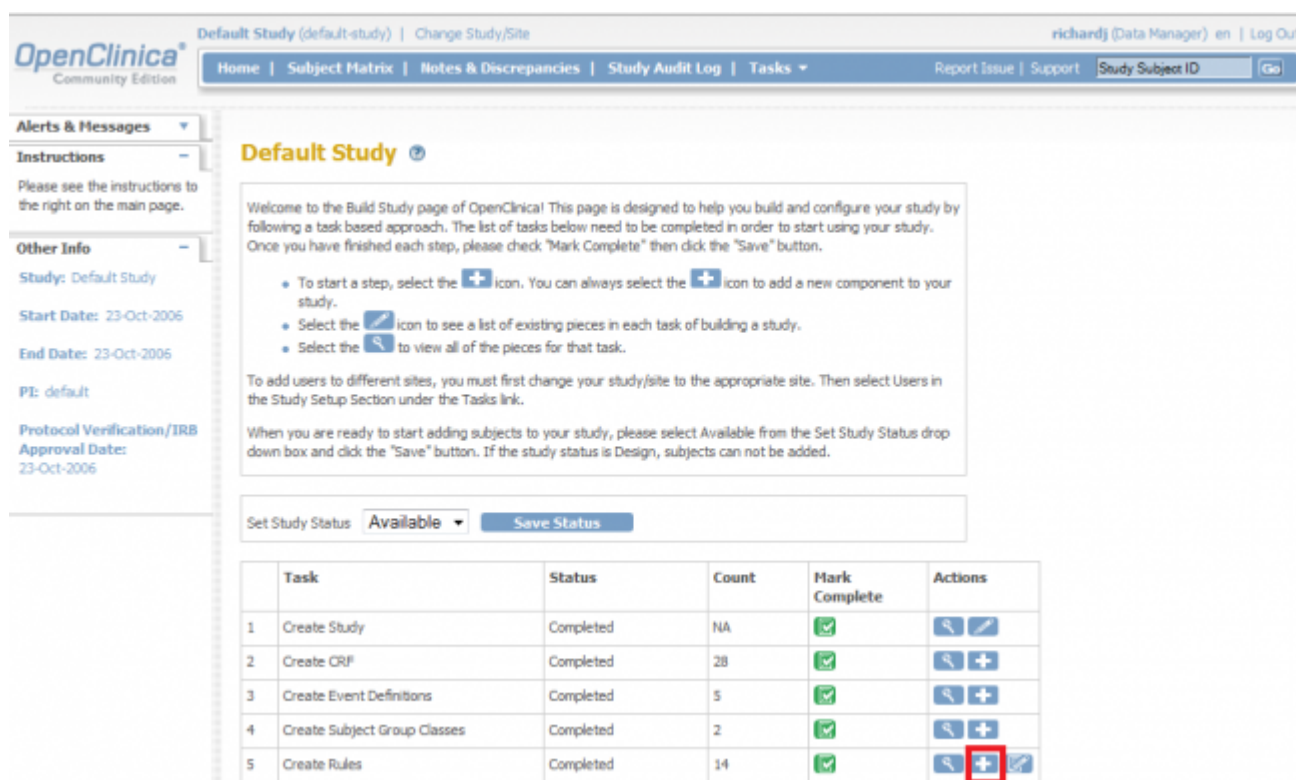


4.4.5 Testing Expressions

















To ensure the logic you provided in a rule is correct, there is a Test Rule feature. This feature simply allows you to confirm that the rule is actually testing the feature you wanted to test. To fully test your rules, it is best practice to enter test data for a test subject.

Ensure the rule is uploaded to OpenClinica:

1. Complete writing the rule
2. Log into OpenClinica
3. Select **Tasks > Build Study**
4. On the Create Rules row of the Build Study page, click 



The screenshot shows the OpenClinica Community Edition interface. The top navigation bar includes links for Home, Subject Matrix, Notes & Discrepancies, Study Audit Log, and Tasks. The main content area is titled "Default Study" and contains a welcome message and instructions for building a study. Below the instructions, there is a "Set Study Status" section with a dropdown menu set to "Available" and a "Save Status" button. At the bottom, there is a table with the following data:

	Task	Status	Count	Mark Complete	Actions
1	Create Study	Completed	NA		 
2	Create CRF	Completed	28		 
3	Create Event Definitions	Completed	5		 
4	Create Subject Group Classes	Completed	2		 
5	Create Rules	Completed	14		  

The following window displays:

Default Study (default-study) | Change Study/Study Site richardj (Data Manager) en | Log Out

Home | Subject Matrix | Notes & Discrepancies | Study Audit Log | Tasks ▾ Report Issue | Support | Study Subject ID

Import Rule Data Default Study

Upload an XML file here:


Go back to the Build Study page



Getting started with rules

- Rules documentation

Templates

- All actions (with comments)
- All actions (without comments)

Workflow 

5. Click **Browse**, then locate and **Open** the XML file containing the rule to be uploaded. You may only upload one file at a time.

6. Click **Continue**, this will prompt the system to check the validity of the rule

7. If the rule is valid, a successful confirmation message is displayed. To save the rule in OpenClinica, you must select "Continue." Otherwise, click "Cancel."

OpenClinica Community Edition

Default Study (default-study) | Change Study/Site

richardj (Data Manager) en | Log Out

Home | Subject Matrix | Notes & Discrepancies | Study Audit Log | Tasks | Report Issue | Support | Study Subject ID | Go

Alerts & Messages

Congratulations! Your rule import passed with no errors. Some existing rules or rule assignments will be updated or replaced. Please review the rule validation results. You can save it to database by clicking "Continue".

Instructions

Please review the rules and rule assignments you have uploaded below. Invalid rules and invalid rule assignments will have a corresponding error message indicating the error that needs to be resolved. Rule updates and rule assignment updates will overwrite existing rules and rule assignments. New rules and new rule assignments will be added.

Other Info

Study: Default Study
Start Date: 2006-10-23

Import Rule Data Default Study

Summary Statistics:

# of new rules: 0	# of new rule assignments: 0
# of rule updates: 1	# of rule assignment updates: 1
# of invalid rules: 0	# of invalid rule assignments: 0

[Continue](#) [Cancel](#)

New Rules

Rule OID	Rule Name	Description	Warnings

Updates to Rules

(Updates your Rules)

Rule OID	Rule Name	Description	Warnings
123	123	123	

Invalid Rules

Rule OID	Rule Name	Description	Potential Import Errors

New Rule Assignments

8. If the rule is invalid, the system displays an error message containing the source of errors. Note that for invalid rules there is no "Continue" button; "Cancel" is the only option at the bottom of the page.

Alerts & Messages

Your rule import had some errors. Please review the rule validation results.

Instructions

Please review the rules and rule assignments you have uploaded below. Invalid rules and invalid rule assignments will have a corresponding error message indicating the error that needs to be resolved. Rule updates and rule assignment updates will overwrite existing rules and rule assignments. New rules and new rule assignments will be added.

Other Info

[Study: Default Study](#)[Start Date: 2006-10-23](#)[End Date: 2006-10-23](#)[PI: default](#)[Protocol Verification/IRB Approval Date: 2006-10-23](#)

Import Rule Data Default Study ⓘ

Summary Statistics:

# of new rules: 11	# of new rule assignments: 5
# of rule updates: 0	# of rule assignment updates: 0
# of invalid rules: 1	# of invalid rule assignments: 5

[Cancel](#)

New Rules

Rule OID	Rule Name	Description	Warnings
RULE1	Unknown Race	Race can not be Unknown	
RULE2	Blank exam date	The exam date in the Non Cascade CRF can not be blank.	
RULE3	No Comments Provided	Abnormal was selected in the Med History CRF, but the comments field was left blank.	
RULE4	Temp is greater than or equal to 500	The temperature for this subject was 500 or greater.	
RULE5	Temp is less than or equal to 105	The temperature for this subject was 105 or less.	
RULE6	Severe or Death	The adverse event was either severe or resulted in Death.	
RULE7	W and Normal Results	W in the selection along with Normal Results.	
DYN1	SKINAB	If Skin eq Abnormal please add comment	
DYN2	INSCOMM	Insert Temp into Other Body Comment	
DYN3	GROUPSHOW1	If Target Lesions eq Yes fill out Target Lesion Section	
DYN4	GROUPSHOW2	If Non Target Lesions eq Yes fill out Non Target Lesion Section	

Updates to Rules

(Updates your Rules)

Rule OID	Rule Name	Description	Warnings
----------	-----------	-------------	----------

Invalid Rules

Rule OID	Rule Name	Description	Potential Import Errors
DYN5	PEEK	Pick One eq 1 Peak	OCRERR_0013 : The following : I_LASTI_1RADIO is not valid.

Message: ""

added

I_TUMOR_NONTARGLES

Rule OID

DYH4

Type: ShowAction

Message: "You have stated there were Non Target Lesions. Please record each non target lesion in the Non Target Lesion Section"

To be added

Rule OID

DYH4

Type: HideAction

Message: ""

To be added

Updates to Rule Assignments

(Adds a Rule Assignment to an existing target and disables all previous Rule Assignments)

Target Rules

Invalid Rule Assignments

Target	Rules	Errors
SE_OBSERVATIONALVISIT_8685.F_GROUPS_ADVER.IG_GROUP_GROUP_I1_GROUP_TC_ADV_PRIMARY_04	<div>Rule Action</div> <div>OID Message</div> <div>Info</div>	OCRERR_0034 : StudyEventDefinition is Invalid.
SE_OBSERVATIONALVISIT_8685.F_NONCASCADE_C_NONCASCADE.IG_NONCA_UNGROUPED.I_NONCA_CAN_PHY1	<div>Rule Action</div> <div>OID Message</div> <div>Info</div>	OCRERR_0034 : StudyEventDefinition is Invalid.
SE_OBSERVATIONALVISIT_8685.F_MEDICAL_HIST_V10.IG_MEDIC_UNGROUPED.I_MEDIC_CAN_BASE14	<div>Rule Action</div> <div>OID Message</div> <div>Info</div>	OCRERR_0034 : StudyEventDefinition is Invalid.
SE_OBSERVATIONALVISIT_8685[ALL].F_NONCASCADE_C_NONCASCADE.IG_NONCA_UNGROUPED.I_NONCA_CAN_PHY4	<div>Rule Action</div> <div>OID Message</div> <div>Info</div>	OCRERR_0034 : StudyEventDefinition is Invalid.
I_LASTI_1RADIO	<div>Rule Action</div> <div>OID Message</div> <div>Info</div>	OCRERR_0023 : Item is invalid.

Cancel

Workflow

Import Rule XML

Validate Rules

Save Rules

OpenClinica Portal Help Contact

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9. Repeat step 1-7 as necessary to upload a new file/ update an invalid rule.

Testing Rules Expression in OpenClinica

In order to make creating/managing Rules easier, OpenClinica provides you with a tool to execute rules in a test environment. With the Test Rule page you will be able to modify, edit and run the rules for the desired results. You will be presented with a real time response on the validity of your test rules before uploading them into OpenClinica.

Once the rules get uploaded successfully to OpenClinica, you can verify the validity of the rule by:

1. On the Build Study page, click the View  icon to access the Manage Rules for <<Study Name>> page. Click [here](#) for more information regarding the Manage Rules page.
2. Locate the rule that you wish to validate and test
3. Under the "Actions" column of that rule, click the "Test"  icon
4. You will be prompted to the Test Rules page (see below). The Test Rules page allows you to enter specific information about the rule you want to test.

[Home](#) | [Subject Matrix](#) | [Notes & Discrepancies](#) | [Study Audit Log](#) | [Tasks](#) ▼
 [Report Issue](#) | [Support](#)

Test Rules

Step 1: Specify target, rule target, & action evaluation value

Item Name: 31jantlorgan [\(View all rules for this item\)](#)

Item Description: Organ

Target:

Rule Expression:

Actions:

If Expression Evaluates:

Execute Action: *Type:* ShowAction
Message: "You selected Other, please specify"
DestinationProperty: I_001AL_31JANTLIFOTHER

If Expression Evaluates:

Execute Action: *Type:* HideAction
Message: ""
DestinationProperty: I_001AL_31JANTLIFOTHER

[Back to Manage Rules](#)

- Enter Target Name: This would be the same statement element as the Target element in RuleAssignment in the XML file
- Enter the Rule Expression: This would be the same element as the expression element in the RuleDef element in the XML file.
- Select the evaluation action from the drop-down true or false

5. Click Validate and Test

6. **Note:** If the rule is valid, you will be told whether it will pass with a True or False result. You also have the ability to specify test values for variables in your expression and re-test the rule. If the rule is valid, then a successful confirmation message is displayed. Also, additional sections named "Step 2" and "Step 3" are displayed (see below). If a rule is invalid, OpenClinica will provide you with feedback in the form of an error message with information on why your rule was considered invalid.

OpenClinica® Community Edition

Default Study (default-study) | Change Study/Site

richardj (Data Manager) en | Log Out

Home | Subject Matrix | Notes & Discrepancies | Study Audit Log | Tasks | Report Issue | Support | Study Subject ID |

Alerts & Messages

The rule is valid for the given target. Review "Step 3: Verify Results" for more information.

Instructions

Please use this page to validate & test a rule in this study. Provide a target in the first test area and an expression in the second test area. If the rule is invalid you will be told what made it invalid. If the rule is valid, you will be told whether it will pass with a True or False result. You also have the ability to specify test values for variables in your expression and re-test the rule.

Other Info

Study: Default Study

Start Date: 2006-10-23

End Date: 2006-10-23

PI: default

Protocol Verification/IRB Approval Date: 2006-10-23

Test Rules

Step 1: Specify target, rule target, & action evaluation value

Item Name: demo1 (View all rules for this item)

Item Description: height

Target: SE_TESTCD.F_DEMOGRAPHICS.IG_DEMOG_UNGROUPED.I_DEMOG_DEMO1

Rule Expression: I_DEMOG_DEMO4 eq 7 and I_DEMOG_DEMO16 eq 7

Actions:

If Expression Evaluates: true

Execute Action: Type: EmailAction

To: me@me.com

From: "John"

Step 2: Specify test values for variables in your rule expression

I_DEMOG_DEMO4: 1

I_DEMOG_DEMO16: 1

Step 3: Verify results

Rule Validation: Valid

Expression Evaluates To: Please enter test values in Step 2 then click 'Validate & Test'

Actions Fired: Please enter test values in Step 2 then click 'Validate & Test'

Ran in: 0.216 seconds

Validate & Test

[Back to Manage Rules](#)

7. Now, you can specify the test values for variables in the rule expression at your discretion and verify if the rule functions as expected by clicking "Validate and Save". Repeat this step as necessary.

Approved for publication by Ben Baumann. Signed on 2016-06-15 3:34PM

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